Conserving Globally Rare Plants on Lands Administered by the Dillon Office of the Bureau of Land Management

Prepared for the

Bureau of Land Management
Dillon Office

By

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Consulting Botanist

Montana Natural Heritage Program
Natural Resource Information System
Montana State Library

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Executive Summary

Southwest Montana has a large number of globally rare plant species, many of which occur on public lands administered by the Bureau of Land Management (BLM). Previously unsurveyed BLM lands in selected areas of Beaverhead and Madison counties were inventoried for globally rare plants on the BLM Sensitive list as well as those considered Species of Concern by the Montana Natural Heritage Program.

These surveys identified 25 new occurrences for ten globally significant plant species, including seven species currently on the BLM Sensitive or Watch List. Four globally rare species -- *Cymopterus hendersonii, Draba ventosa, Eriogonum soliceps* and *Primula alcalina* -- were discovered on BLM lands in Montana for the first time. *Primula alcalina* was thought to be extirpated in Montana and the metapopulation discovered in the Cabin Creek drainage is now the only known occurrence in the state. *Eriogonum soliceps* is being described as new to science, and has been confirmed at only one other site -- the type locality in Idaho.

Herbarium research conducted during this study confirmed that another globally rare plant *Erigeron parryi*, first described over 100 years ago, is a distinct species found only in southwest Montana. Five populations of this Montana endemic occur on BLM lands administered by the Dillon Office.

These surveys also yielded significant new information on Montana Species of Concern that are not globally rare. Altogether, 23 occurrences were documented for 17 state rare species. Five of these plants were documented on BLM lands in Montana for the first time: *Allium parvum, Braya humilis, Erigeron asperugineus, Kobresia simpliciuscula* and *Pedicularis crenulata* (the first record for Montana).

This new data, along with information summarized from previous studies, was used to develop or expand ecological and management profiles for globally rare plants on BLM lands administered by the Dillon Office. The results also highlighted seven landscapes of particular significance for conservation of globally rare plant resources, based on the presence of healthy populations of multiple species and high-quality plant communities. Descriptions of these areas are provided, summarizing landscape-level ecological processes and their effects on plant species of concern, as well as management recommendations for each area. Survey and research priorities for both globally rare species and significant landscapes are also identified.

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Several current and former staff of the Montana Natural Heritage Program also made important contributions to this project. Bonnie Heidel developed the initial project proposal, and Catherine Jean assisted with selection of survey sites and provided early coordination. Sue Crispin coordinated project completion, including editing and production of the final report, and Greg Kudray assisted with final editing and proofreading. Coburn Currier attended to the many details involved in final layout and production of the report.

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